

Nanopublication — Computational Image Analysis - AQC0626

by Arnaud Quercy · D minor - Research on Harmony · 2024












Claim 1: Computational Image Analysis - AQC0626

The artwork D minor - Research [1] on Harmony (AQC0626) [2] by Arnaud Quercy [2] underwent comprehensive computational analysis [3] on 2026-02-04. Method: k-means clustering with 10 colors extracted. Metrics documented: color distribution, texture analysis, brightness/contrast, spatial patterns.

CONTEXT

Analysis performed according to MMIDS-CMP-2025 [3] includes four metric categories: (1) Color distribution via k-means (10 colors), (2) Texture analysis using Haralick features, (3) Brightness and contrast measurements, (4) Spatial pattern characterization. Source image [5]: 2333x3499 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1		35.2136	red-violet	very dark purple
2		17.1	yellow-orange	goldenrod
3		14.6	orange	chocolate
4		13.4	red-violet	dusty mauve
5		11.1	yellow-orange	sandybrown
6		11.0	orange	tomato
7		3.8	black	black
8		3.3	red-violet	dusty mauve
9		2.8	orange	burnt sienna
10		0.5	red-violet	silver
11		0.3	red-orange	very dark red [Accent]

Color Families:

Family	%
red-violet	39.5
orange	28.5
yellow-orange	28.2
black	3.8
red-orange	0.3

Accent Colors:

Hex	Family	Name	Chroma
530B02	red-orange	very dark red	39.2

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.23
Mean Local Roughness	0.019
Roughness Uniformity	0.027

Metric	Value
Edge Density	0.062
Mean Gradient Magnitude	0.16
Gradient Variance	0.07
Gradient Smoothness	0.0
Directional Coherence	0.026
Pattern Complexity	0.116
Pattern Repetition	1.0
Detail Frequency Ratio	0.637
Spatial Variation	0.2
Texture Consistency	0.544

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.437
Brightness Variance	0.23
Brightness Uniformity	0.473
Brightness Skewness	-0.122
Brightness Entropy	7.223
Rms Contrast	0.23
Michelson Contrast	1.0
Weber Contrast	0.788
Mean Local Contrast	0.021
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.612
Shadow Percentage	40.089
Midtone Percentage	33.717
Highlight Percentage	26.195
Shadow Clipping	0.009
Highlight Clipping	0.005
Tonal Balance	0.0
Fine Contrast	0.01
Medium Contrast	0.027
Coarse Contrast	None
Multiscale Contrast Ratio	1.0
Edge Contrast	0.16
Contrast Clustering	0.456

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.779
Color Clustering	0.477
Color Transition Smoothness	0.571
Transition Uniformity	0.507
Sharp Transition Ratio	0.1
Transition Directionality	0.03

Metric	Value
Mean Saturation	0.6
Saturation Variance	0.051
Low Saturation Ratio	0.12
Medium Saturation Ratio	0.413
High Saturation Ratio	0.467
Saturation Clustering	0.998
Hue Concentration	0.674
Complementary Balance	0.001
Analogous Dominance	0.645
Temperature Bias	0.732

Methodology

This analysis employs standardized computational methods for objective image characterization. Color extraction uses k-means clustering algorithm. Texture analysis applies Haralick feature extraction. Brightness metrics include mean, variance, and distribution analysis. Spatial patterns are characterized through coherence and clustering measurements. All methods are deterministic and reproducible. Analysis performed by Multimodal Institute's computational imaging systems.

REFERENCES

[1] Arnaud Quercy (2024). D minor - Research on Harmony — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0626.html>

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2024/01/d-minor-research-on-harmony_6zo.html

[3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 h <https://multimodal.institute/en/publications/2025/11/mmids-cmp-2025-computational-image-analysis-standard-dg1.html>

EPISTEMIC PROFILE

Claim type computational analysis

Voice third person

Epistemic status empirical measurement

Methodology computational analysis

Certainty high

CHECKSUM (SHA-256)

3354606a085f099eaf59145acce2b315f3ead2b1c04a1055ba9fc03d-daca5600

Artist Arnaud Quercy

Date 2024

Collection Synesthetic Explorations

Certificate 20240615-0122

Asset code AQC0626

Version 1

Published 2026-04-09

© 2026 Multimodal Institute

Published by: Art Quam Anima Publishing New York LLC — publishing.artquamanima.com

Date of publication: 2026-04-09

Persistent URI: <https://multimodal.institute/en/nanopubs/2026/02/AQC0626-computational-image-analysis-aqc0626.pdf>

Content available under Creative Commons Attribution-NonCommercial 4.0 License (CC BY-NC 4.0)